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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/737,349	12/15/2003	William F. Fling	Fling.04	5996

7590 12/30/2004
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EXAMINER	
WILSON, KATINA M	
ART UNIT	PAPER NUMBER
2856	

DATE MAILED: 12/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/737,349	FLING ET AL	
	Examiner	Art Unit	
	Katina M Wilson	2856	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 December 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 12-15 is/are rejected.
- 7) ☒ Claim(s) 1-15 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 December 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- | | |
|---------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

The drawings are objected to because 46 in figure 1, 3, 4, 5; 91, 92, 39, 103 in figure 5; 68, 86 in figure 10 and 11; 141, 39, 146 in figure 13 are shown in the drawings but are not disclosed in the specification. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

Claims 1-15 are objected to because of the following informalities: An actuator is not disclosed in the specification, the language used in the claim is not consistent with the language in the specification. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

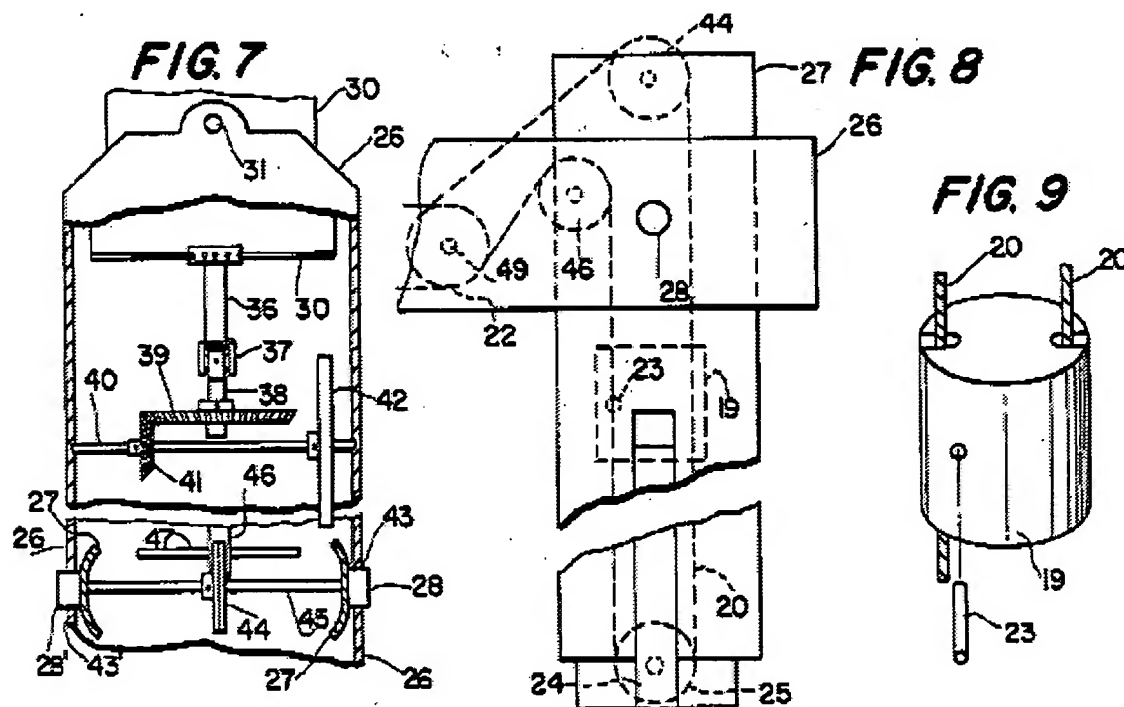
Claims 1, 13 and 14-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Fling et al 4147060.

Fling et al teaches an adjustable frame liquid level measuring device comprising: housing 30; a flexible coupling having 1st section end 26 and 2nd section end 27 where the 1st end 26 is connected to the housing; a lower assembly connected to the 2nd end of the flexible coupling, the lower assembly including a float 19 constrained to a vertical

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movement in response to changes in liquid depth/level in the container/drum 14 having at least one opening 13 and an actuator/transmission line 20 arranged to move in response to vertical movement of the float, the flexible coupling being arranged to maintain the actuator in a vertical orientation in the liquid when the actuator and the housing are out of vertical alignment; coupler mechanism/(rotatable shaft 36, universal joint 37, stub shaft 38, bevel gear 39, drive pulley 42, shaft 40, bevel gear 41) arranged to transfer movement of the actuator to the indicator 12 (col. 4-8, Fig. 1, 2, 7-9).

As to claim 15, Fling et al teaches the housing, the indicator, an insert mounted between the indicator and the housing are free to rotate about an axis centered on the housing (Fig. 10-11).



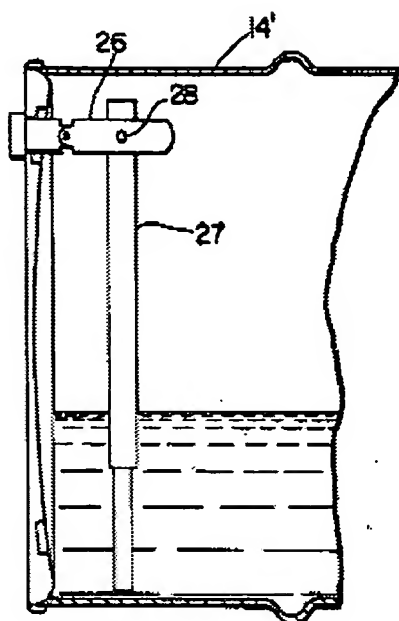


FIG. 2

FIG. 11

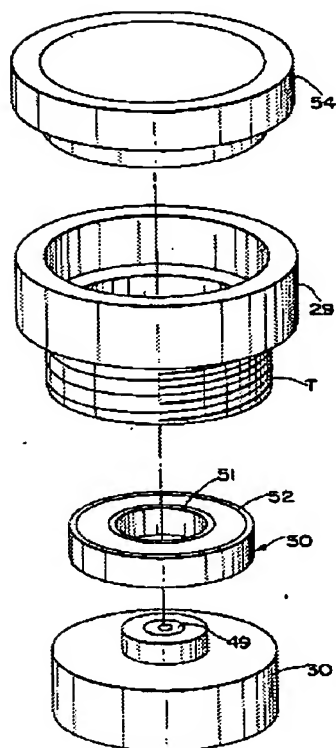
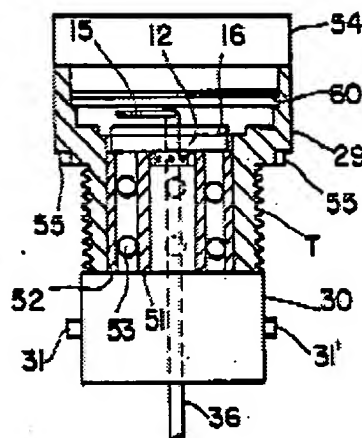


FIG. 10

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

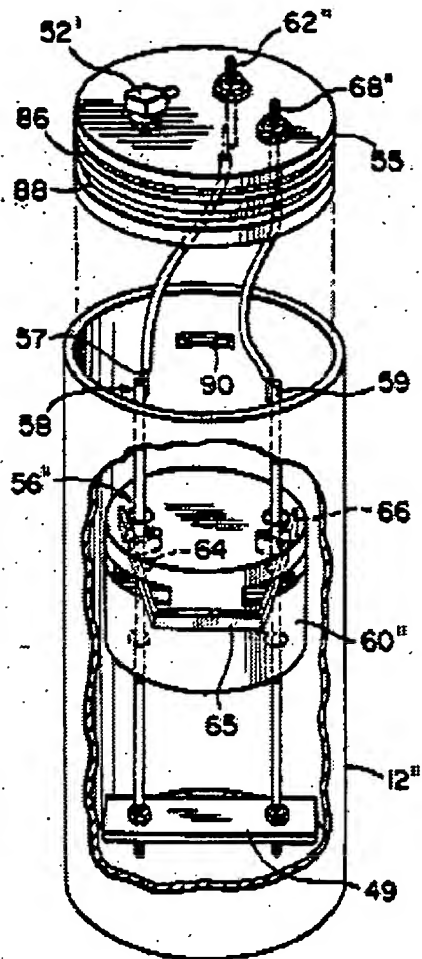
Claims 2-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fling et al in view of Helm 5196824.

Fling et al does not the float being slidably mounted to a pair of parallel rods such that the float is constrained to linear movement lengthwise along the pair of parallel rods. The transmission lines 20 functions as pair of parallel rods allowing the float to be slidably mounted to one of the rods to such that the float is constrained to linear movement lengthwise along one of the rods. Even though Fling et al does not teaches a pair of parallel rods the prior art clearly teach this limitation. Helm teaches a float actuated liquid level monitoring apparatus, which include a pair of parallel rods connected to a housing and arranged to be inserted into the liquid; the float being slidably mounted to the rods such that the float is constrained to linear movement lengthwise along the rods.

It would have been obvious to a skill artisan at the time the present invention was made to use a pair of parallel rods in conjunction with a float to monitor and/or measure liquid level.

As to claim 3, Helm teaches the float includes a 1st and 2nd passage extending there through (Fig. 6) and arranged in corresponding relationship to the pair of rods such that a 1st passage extends through the 1st and 2nd rod extends through the 2nd, the passages and rods being arranged to constrain the float to linear movement along the rods.

FIG. 6



Claim 2-3 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fling et al in view of Werner 3709038.

Fling et al does not the float being slidably mounted to a pair of parallel rods such that the float is constrained to linear movement lengthwise along the pair of parallel rods. The transmission lines 20 functions as pair of parallel rods allowing the float to be slidably mounted to one of the rods to such that the float is constrained to linear movement lengthwise along one of the rods. Even though Fling et al does not teaches

a pair of parallel rods the prior art clearly teach this limitation. Werner teaches a liquid level indicator, which include a pair of parallel rods 14 connected to a housing and arranged to be inserted into the liquid; the float 80 being slidably mounted to the rods such that the float is constrained to linear movement lengthwise along the rods.

It would have been obvious to a skill artisan at the time the present invention was made to use a pair of parallel rods in conjunction with a float to prevent rotational movement of the float.

As to claim 3, Werner teaches the float 80 includes a cork 83 having two oppositely disposed recesses 82 in the outer edges thereof engaging frame 25b so as to prevent rotational movement of the float, rod appears to be constrain the float to linear movement along the rods.

As to claim 12, Fling does not teaches the coupling mechanism includes a magnetic coupler arranged to couple rotational movement of the actuator to the indicator. Werner teaches the coupler mechanism/shaft 44 includes a magnetic coupler arranged/magnet assembly 40 to couple rotational movement of the actuator/helical element 60 to the indicator (col. 2-4; fig. 2, 3, 5).

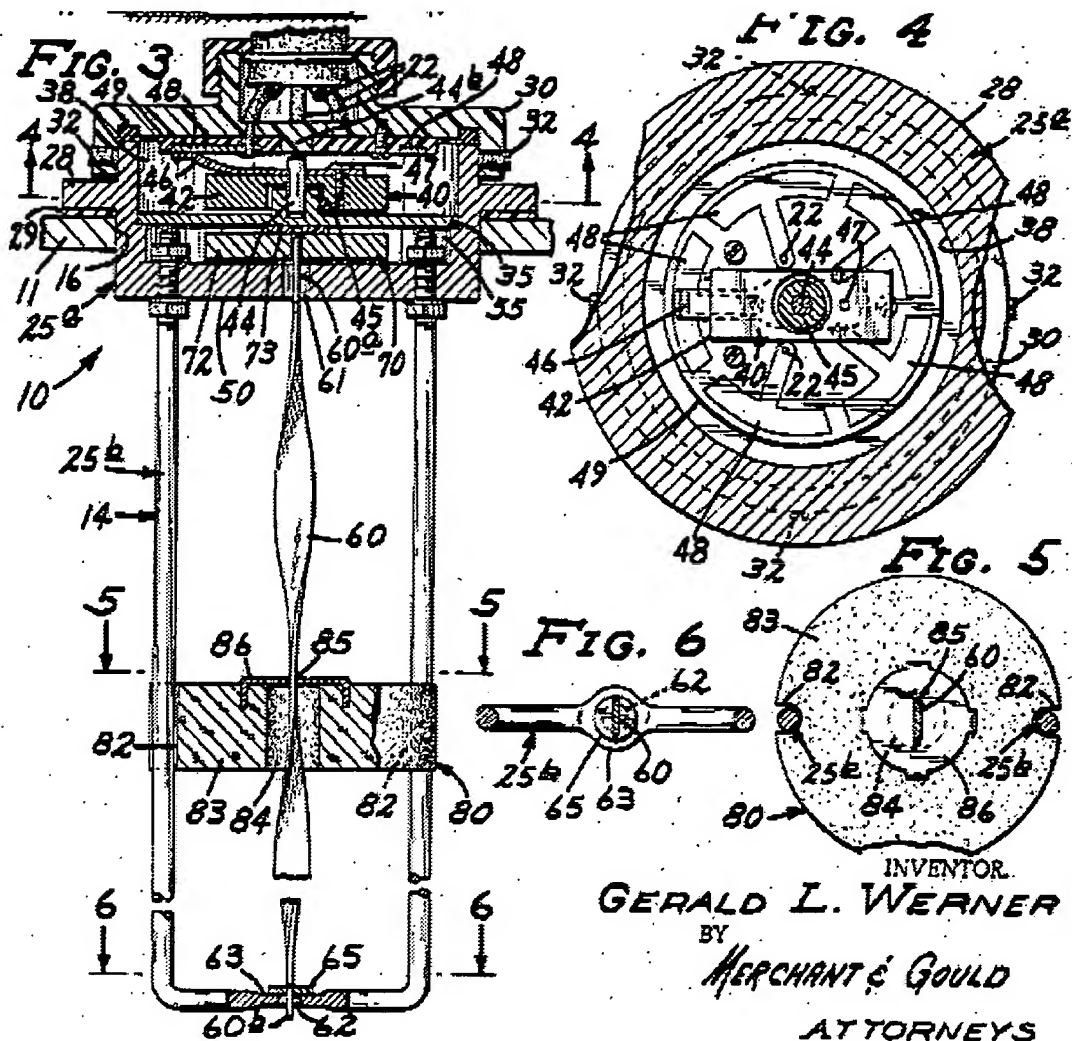
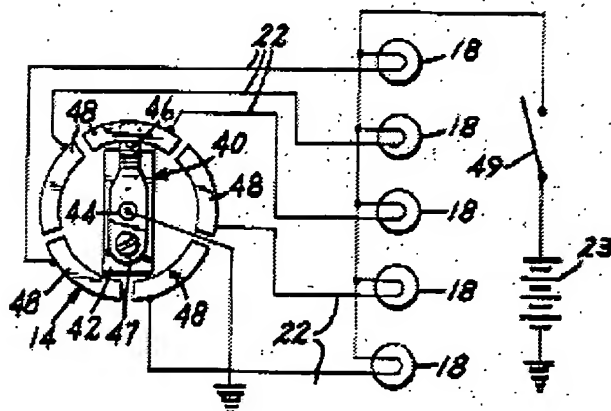


FIG. 2



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Allowable Subject Matter


Claims 4—11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Closing

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Katina M Wilson whose telephone number is 571-272-2209. The examiner can normally be reached on Mon-Fri 6:15am-4:00pm, off 1st Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron E Williams can be reached on 571-272-2209.

kw


DANIEL S. LARKIN
PRIMARY EXAMINER